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WASHINGTON, DC 20036			ART UNIT	PAPER NUMBER
			2481	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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		Application No.	Applicant(s)				
Office Action Summary		10/572,983	IKEDA ET AL.				
		Examiner	Art Unit				
		GELEK TOPGYAL	2481				
Period fo	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1) 🔀	Responsive to communication(s) filed on 29 De	ecember 2010					
	· · · · · · · · · · · · · · · · · · ·						
3)	This action is FINAL . 2b) This action is non-final. Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
٥/١	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
	closed in accordance with the practice ander 2	x parte Quayle, 1909 G.B. 11	, 400 0.0. 210.				
Disposit	ion of Claims						
 4) ☐ Claim(s) 5-12 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 5-12 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement. 							
Applicat	ion Papers						
9) ☐ The specification is objected to by the Examiner. 10) ☑ The drawing(s) filed on 22 March 2006 is/are: a) ☑ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority (under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.							
2) 🔲 Notio 3) 🔀 Infor	ce of References Cited (PTO-892) the of Draftsperson's Patent Drawing Review (PTO-948) the mation Disclosure Statement(s) (PTO/SB/08) the No(s)/Mail Date 11/17/10, 1/14/11, 1/26/11, 2/23/11.	4) Interview Summ Paper No(s)/Ma 5) Notice of Inform 6) Other:					

Application/Control Number: 10/572,983 Page 2

Art Unit: 2481

DETAILED ACTION

Claim Objections

1. **Claim 11** is objected to because of the following informalities: Claim 11 present states "The program of claim 7, wherein", it should be amended to read "The program stored on a non-transitory computer readable medium, wherein". Appropriate correction is required.

Response to Arguments

- 2. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.
- 3. In re pages 8-9, the applicants present the argument that although Tsumagari teaches that an event is judged to be performed by either the virtual machine or the playback control engine, it does not teach the newly added limitations of "the application is associated with event registration information indicating whether or not each of the key events has been registered therewith, and any key event that is indicated as having been registered with the event registration information can be processed by the associated application" and "the judgment by the event manager is made by, when the event is generated in response to the user operation, judging whether or not the event has been registered with the event registration information associated with the application that is executed by the virtual machine".

In response, the examiner respectfully disagrees. After careful consideration, it is still contended by the examiner that Tsumagari teaches the newly added limitations.

Particularly, paragraphs 257 and 258 teaches wherein a PTT event is output from the

DVD-Video playback engine 200 to the event/command handler 320 such that the PTT event is *stored/held* as an ENAV event. Thereafter, the ENAV interpreter 330 checks the stored/held ENAV event as to whether it is a corresponding event to be applied to the ENAV content. Thus the storing/holding of the PTT event (which is initially generated by the user as a playback operation of a specific title), "registers" the event to the ENAV interpreter 330 and furthermore, the ability to determine that the PTT event (stored as ENAV event) is a corresponding event teaches the claimed "key event that is indicated as having been registered with the event registration information can be processed by the associated application"). Therefore, the prior art Tsumagari is still maintained.

4. In re pages 9-10, the applicants contend that Tsumagari merely teaches the command of a "menu call" and thus fails to teach the new limitations of "AV functions that include play, stop, forward play, backward play, skip, pause on, and still off, and the event indicates that the user has operated one of keys that are respectively allocated to the AV functions".

In response, the examiner respectfully disagrees. Tsumagari in paragraph 261 teaches of various playback operations including "play, stop, pause, fastforward, rewind, or the like" and "chapter jump and title jump" that are executable by the DVD-Video playback engine 200. Furthermore, paragraphs 260-262 teaches that an input user command (which is later termed as "PTT event") is executable by both the DVD-Video playback engine 200 and the ENAV engine 300 (including Event generation-command/property processor 320 and ENAV interpreter 330).

Application/Control Number: 10/572,983 Page 4

Art Unit: 2481

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

- 6. Claims 5-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Tsumagari et al. (US 2003/0161615) hereinafter "Tsumagari".
- 7. **Regarding claim 5,** Tsumagari teaches a playback apparatus (Fig. 1, DVD-Video Player 100) that performs playback of a title that includes a digital stream (Fig 31 and paragraph 0075-0076 teaches of "Video title set (VTS#i) and another video title set..."), and execution of an application (Fig. 31 and paragraphs 0075-0076 teaches an "ENAV content 30" that meets the claimed "application"), comprising:

a virtual machine operable to execute the application (Fig. 1 and paragraph 0092, "ENAV Engine 300");

a playback control engine unit operable to perform playback control on the digital stream (Fig. 1 and paragraph 0089 teaches "DVD-Video playback engine 200"); and an event manager (Fig. 1 and paragraphs 0093, 0109-0113 teaches an "Event generation-command/property processor 320" and "ENAV interpreter 330") operable to,

when an event is generated in response to a user operation (paragraphs 0192 teaches

an example where a user inputs an operation in the form of a "menu button"), judge whether or not to cause the application to process the event (paragraph 0194 teaches wherein "if ENAV contents include ENAV menu contents, event generationcommand/property process 320 executes a process of the ENAV menu". Therefore, given the user operation of a "menu button", it is judged that the "ENAV engine 300" performs the user operation of a menu operation. On the other hand, paragraph 0193 teaches wherein "if ENAV contents that have been fetched ... do not contain any ENAV menu ... event generation-command/property processor 320 outputs a video-audio control signal as a "full video mode that means ... of the DVD-Video playback engine 200"), and when a result of the judgment is affirmative, further operable to output one of key events so as to cause the application to process the event (paragraph 0194 teaches wherein "if ENAV contents include ENAV menu contents, event generationcommand/property process 320 executes a process of the ENAV menu". Therefore, given the user operation of a "menu button", it is judged that the "ENAV engine 300" performs the user operation of a menu operation.),

wherein the event manager includes an operation manager that, when the result of the judgment is negative, causes the playback control engine unit to process an operation corresponding to the event (as discussed above, in the determination of whether the ENAV contents 30 includes ENAV menu contents, paragraph 0193 teaches wherein "if ENAV contents that have been fetched ... **do not** contain any ENAV menu ... event generation-command/property process 320 outputs a video-audio control signal as a "full video mode that means ... of the **DVD-Video playback engine 200**"),).

whether or not each of the key events has been registered therewith, and any key event that is indicated as having been registered with the event registration information can be processed by the associated application (paragraph 257 and 258 teaches wherein a PTT event is output from the DVD-Video playback engine 200 to the event/command handler 320 such that the PTT event is *stored/held* as an ENAV event. Thereafter, the ENAV interpreter 330 checks the stored/held ENAV event as to whether it is a corresponding event to be applied to the ENAV content. Thus the storing/holding of the PTT event (which is initially generated by the user as a playback operation of a specific title), "registers" the event to the ENAV interpreter 330 and furthermore, the ability to determine that the PTT event (stored as ENAV event) is a corresponding event teaches the claimed "key event that is indicated as having been registered with the event registration information can be processed by the associated application"),

the judgment by the event manager is made by, when the event is generated in response to the user operation, judging whether or not the event has been registered with the event registration information associated with the application that is executed by the virtual machine (paragraph 257 and 258 teaches wherein a PTT event is output from the DVD-Video playback engine 200 to the event/command handler 320 such that the PTT event is *stored/held* as an ENAV event. Thereafter, the ENAV interpreter 330 checks the stored/held ENAV event as to whether it is a corresponding event to be applied to the ENAV content. Since the PTT event is stored as an ENAV event, the ENAV interpreter 330 is able to judge that the ENAV event is "registered" since the

Application/Control Number: 10/572,983

Art Unit: 2481

ENAV interpreter 330 is able to use the ENAV event as taught in paragraphs 260 and 262).

Page 7

Regarding claim 6, Tsumagari teaches the claimed wherein the digital stream (Fig 31 and paragraph 0075-0076 teaches of "Video title set (VTS#i) and another video title set..."), the application (Fig. 31 and paragraphs 0075-0076 teaches an "ENAV content 30" that meets the claimed "application"), and an index table have been recorded on a recording medium the index table shows titles and operation mode objects in one-to-one correspondence (Paragraphs 0058, 0062, 0064-65 teaches a "DVD video disc 1 comprising DVD-Video content 10 as well as ENAV contents 30, the DVD-Video contents 10 comprising VMG/VTSI, which is control data for one or more video contents VTS#1-VTS#n as well as the ENAV contents 30 allowing a user to playback the contents of each VTS by a method different from VMG/VTSI prepared by the provider", this meets the claimed "index table", since either the DVD-Video contents 10 and/or the ENAV contents 30 corresponds to a particular VMG/VTSI (and the corresponding VTS#1-VTS#n)), the operation mode objects include an operation mode object for a movie mode and an operation mode object for a virtual machine mode (as discussed above, and furthermore, paragraphs 0064-0066 teaches "ENAV contents 30 comprise playback information which contains a markup language, script language or the like, which describes playback methods of the ENAV contents data body and/or DVD-Video contents 10, the language used as the playback control information may be JavaScript", which meets the claimed "movie mode" and "virtual machine mode"), and the judgment made by the event manager is processing of, when one of the titles

corresponding to the operation mode object for the virtual machine mode is selected as a current title (paragraph 0191 teaches "on the ENAV engine 300 side, after ENAV interpreter 300 fetches ENAV contents 30), judging to which one of the key events an application written in the operation mode object for the virtual machine mode corresponds (as discussed above, paragraphs 0192 teaches an example where a user inputs an operation in the form of a "menu button". Paragraph 0194 teaches wherein "if ENAV contents include ENAV menu contents, event generation-command/property process 320 executes a process of the ENAV menu". Therefore, given the user operation of a "menu button", it is judged that the "ENAV engine 300" performs the user operation of a menu operation. On the other hand, paragraph 0193 teaches wherein "if ENAV contents that have been fetched ... do not contain any ENAV menu ... event generation-command/property process 320 outputs a video-audio control signal as a "full video mode that means ... of the DVD-Video playback engine 200". Therefore, the limitation of "to which one of the key event ... for the virtual machine mode corresponds" is met by the DVD-Video Player 100's ability to determine to where the input operation of a "menu button" corresponds/(to be directed to)).

Claims 7 and 8 are rejected for the same reasons as discussed in claim 5 above.

Regarding claim 9, Tsumagari teaches the claimed wherein the playback control performed by the playback control engine unit involves audio video (AV) functions that include play, stop, forward play, backward play, skip, pause on, and still off (paragraph 261 teaches of various playback operations including "play, stop, pause,

fastforward, rewind, or the like" and "chapter jump and title jump" executable by the DVD-Video playback engine 200), the event indicates that a user has operated one of keys that are respectively allocated to the AV functions and the operation manager causes the playback control engine unit to execute one of the AV functions corresponding to the event as the processing of the operation (paragraphs 260-262 teaches that an input user command (which is termed as "PTT event") is executable by the DVD-Video playback engine 200 and the ENAV engine 300 (including Event generation-command/property processor 320 and ENAV interpreter 330)).

Regarding claim 10, Tsumagari teaches the claimed wherein

the digital stream (Fig 31 and paragraph 0075-0076 teaches of "Video title set (VTS#i) and another video title set..."), the application (Fig. 31 and paragraphs 0075-0076 teaches an "ENAV content 30" that meets the claimed "application"), and an index table have been recorded on a recording medium

the index table shows whether each of the operation mode objects corresponding to the titles is for movie mode or virtual machine mode (Paragraphs 0058, 0062, 0064-65 teaches a "DVD video disc 1 comprising DVD-Video content 10 as well as ENAV contents 30, the DVD-Video contents 10 comprising VMG/VTSI, which is control data for one or more video contents VTS#1-VTS#n as well as the ENAV contents 30 allowing a user to playback the contents of each VTS by a method different from VMG/VTSI prepared by the provider", this meets the claimed "index table", since either the DVD-Video contents 10 and/or the ENAV contents 30 corresponds to a particular VMG/VTSI (and the corresponding VTS#1-VTS#n))

each operation mode object for the movie mode includes a navigation command showing a control procedure, the navigation command is a command for instructing the playback control engine unit to perform playback, status obtainment, and status setting (paragraph 261 teaches of navigation commands that are related to the DVD video contents controlled by the DVD-Video playback engine 200. The navigation commands are met by "menu call, title jump or chapter jump" (which meets the claimed "status setting" command), DVD status signal (which meets the claimed "status obtainment"), and "playback operation" (which meets the claimed "playback operation")),

the movie mode is mode for controlling execution of each of the AV functions by the playback control engine unit in accordance with the navigation command written in each operation mode object (paragraphs 262 and 267 teaches that the "movie mode" (which is the DVD Video being played back) is affected by the input commands/instructions in paragraph 261)), and

the playback apparatus further comprises a module manager operable to select one of the titles that is to be played back from now based on the index table (Paragraphs 0058, 0062, 0064-65 teaches a "DVD video disc 1 comprising DVD-Video content 10 as well as ENAV contents 30, the DVD-Video contents 10 comprising VMG/VTSI, which is control data for one or more video contents VTS#1-VTS#n as well as the ENAV contents 30 allowing a user to playback the contents of each VTS by a method different from VMG/VTSI prepared by the provider", this meets the claimed "index table", since either the DVD-Video contents 10 and/or the ENAV contents 30 corresponds to a particular VMG/VTSI (and the corresponding VTS#1-VTS#n). The

claimed "module manager" is met by the DVD-Video playback engine which controls the playback of the DVD-Video contents 10).

Claims 11 and 12 are rejected for the same reasons as discussed in claim 9 above.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GELEK TOPGYAL whose telephone number is (571)272-8891. The examiner can normally be reached on 8:30am -5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter-Anthony Pappas can be reached on 571-272-7646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/572,983 Page 12

Art Unit: 2481

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gelek Topgyal/ Examiner, Art Unit 2481

/Peter-Anthony Pappas/ Supervisory Patent Examiner, Art Unit 2481